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EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 12/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/664,472

Applicant(s)

GRAEF ET AL

Examiner

C. Lynne Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-15, 17-19, 22, 27, 28, 31-44, 46-51, and 53-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahr (5,733,273).
2. With respect to Claims 1, 33-41, 46, 49, 50, 53 and 55: Ahr discloses the use of an absorbent article with a topsheet, backsheet and core (See Figure 5) where the core is an absorbent composite (10) that is made of a fibrous absorbent matrix and superabsorbent material that is distributed directly in the fibrous matrix in two or more bands (12) (See abstract and Figures 2-4). Ahr discloses the fibrous matrix can comprise modified cellulose fibers that are disclosed in reference (Herron et al. 5,183,707) which is incorporated within. Herron discloses the cellulose fibers are cross-linked cellulose fibers that are formed to an absorbent core by a wetlaid process

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(column 4, lines 35-36 and column 17, lines 11-17). The examiner considers crosslinked fibers that are wetlaid to form a core, to be bonded cellulose fibers.

3. With respect to the composite being foam formed: The formation of the fibrous matrix, is a Product-by-Process limitation, and these limitations are not limited to the manipulations of the steps, only the structure implied by these steps (see MPEP 2113). It follows that if the product in the claim with the product-by-process limitation is the same as the product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. Therefore, the fibrous matrix being foam formed is anticipated by the Ahr reference.

4. With respect to the multiple layer composite: Ahr discloses the composite can be made of an upper layer and a lower layer (Figure 3). The examiner considers the upper layer to be the acquisition layer, and the lower layer to be the storage layer, where each layer contains the superabsorbent strips. Furthermore, Ahr discloses the superabsorbent strips to be laminated between intermediate tissue layers (Column 4, lines 54-56).

5. With respect to Claim 2: Ahr discloses in column 4, lines 18-21, the fibrous matrix, which comprises the distribution zones, is free of superabsorbent material.

6. With respect to Claims 3-5: Ahr discloses the bands can be homogeneously laid out or randomly laid out, and will continue through out the length of the composite. (See figures 2-4, column 5, lines 32-47 and column 6, lines 20-23).

7. With respect to Claims 6 and 7: See Ahr, column 4, lines 35-64.

8. With respect to Claim 8, 9, 12 and 13: See Ahr, column 4, lines 18-31.

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9. With respect to Claims 10 and 11: The claims are anticipated by the Ahr reference, due to the fact that claims 10 and 12 do not recite or require the resilient fibers to be chemically stiffened fibers. The scope of Claims 10 and 11 still allow for the resilient fibers to be synthetic fibers. Ahr discloses the use of synthetic fibers, which meets the limitations of the Markush group in Claim 9, as well as anticipates Claims 10 and 11.

10. With respect to Claims 14, 15 and 17: The claims are anticipated by the Ahr reference, due to the fact that claims 14, 15 and 17 do not recite or require that the Fibrous matrix comprises matrix fibers. The scope of Claims 14, 15 and 17 still allow for the fibrous matrix to be made from resilient fibers. Ahr discloses the use of resilient fibers, which meets the limitations of the Markush group of Claim 8, as well as anticipates Claims 14, 15 and 17.

11. With respect to Claims 18 and 22: See Ahr, Column 4, line 42 to Column 5, line 16.

12. With respect to Claim 19: See Ahr, Column 4, line 44.

13. With respect to Claim 27: Ahr discloses the basis weight of the fibrous matrix material as well as the superabsorbent strips, therefore adding the basis weights would give a basis weight range of 100-775 g/m². (Column 2, lines 58-67)

14. With respect to Claim 28: See Ahr, Column 3, lines 1-4.

15. With respect to Claims 31 and 32: See Ahr, column 4, lines 31-34.

16. With respect to Claims 42-44, and 51: See Figure 5 and column 1, lines 13-16.

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17. With respect to Claim 47: Figure 3 shows the top acquisition layer curing in towards the center, therefore the top plain of the top surface is less than the top surface of the storage layer.
18. With respect to Claim 48: See Ahr, Figure 3.
19. With respect to Claim 54: See Figures 2-4.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
22. Claims 16, 20, 21, 29, and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr et al. (5,733,273).

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23. With respect to Claim 16 and 30: Ahr discloses the fibrous matrix can contain either wood pulp fibers or resilient fibers, however does not disclose the wood pulp fibers being 15% of the overall weight of the composite or the resilient fibers being 10-60% of the absorbent composite's overall weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have either the wood pulp fibers be 15% of the absorbent composite's weight, or the resilient fibers of the fibrous matrix, comprise 10-60% of the weight of the absorbent composite, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

24. With respect to Claim 20 and 21: Ahr discloses the absorbent material is superabsorbent material, however does not disclose the superabsorbent material comprising 0.1%-80% or 45% of the absorbent composite's overall weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the superabsorbent material being 0.1-80% or 45% of the absorbent composite's weight, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

25. With respect to Claim 29: Ahr discloses, by incorporation, that the fibrous matrix is made of crosslinked cellulose fibers, however fails to disclose the crosslinked cellulose fibers being 45% of the absorbent composite's overall weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made

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to have the crosslinked cellulose fibers being 45% of the absorbent composite's weight, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

1. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr in view of Schmidt et al. (6,294,710).
2. With respect to Claims 23 and 24: Ahr, as disclosed above for Claim 1, fails to disclose the use of a wet strength agent. Schmidt et al. discloses the use of a stiffening agent for use with cellulosic fibers, such as polyamide-epichlorohydrin or polacrylamide (column 6, line 62-column 7, line 12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the stiffening agent of Schmidt into the composite material of Ahr, on order to provide increased permeability, flexibility and hydrophilicity (See Schmidt column 6).
3. With respect to Claim 25: See Schmidt, Column 7 ,lines 1-12, and Column 14, line 49.

With respect to Claim 26: Schmidt discloses the stiffening agent to be present in an amount of 2%, but fails to disclose the amount of 0.25%. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the stiffening agent in the amount of 0.25% since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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26. Claims 45 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr in view of Ryan et al. (4,326,528).

27. Ahr disclose the absorbent composite can be used in such things as diapers, however fails to specifically state that the diapers contain leg gathers. Ryan discloses and shows that it is well known in the art to use leg gathers on diapers (see Figures 13), but adding elastic to the sides (column 4, lines 15-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to add elastic members to form leg gathers, as disclosed by Ryan, to the diaper form of the article of Ahr, in order to produce an article with waste retentive sides (See Ryan Column 1).

Response to Arguments

28. Applicant's arguments with respect to claims 1-55 have been considered but are not persuasive.

29. Ahr (5,733,273) discloses superabsorbent material distributed directly in a fibrous matrix in two or more bands (12), as shown in figure 2. The bands (12), while disclosed by Ahr as 'strips,' fulfill the definition of 'band.' The bands (12) are homogenously distributed throughout the fibrous matrix, as disclosed in column 6, line 22. The bands (12) are directly connected to the fibrous matrix, and therefore are considered to be directly distributed throughout the fibrous matrix. Ahr therefore discloses all limitations of the instant claim.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

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(i.e., superabsorbent incorporated into the fibrous matrix without the aid of a laminate construction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Ahr discloses bands (12) that are distributed directly within the fibrous matrix, as described in the paragraph above. Further, it is unclear how the bands of the instant invention may be incorporated into the fibrous matrix without the aid of a laminate construction, as the definition of 'laminate' merely requires uniting superposed layers of one or more materials, and does not by definition require an adhesive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

CLA

November 25, 2003



WEILUN LO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700